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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/744,297	01/23/2001	Helmut Goeldner	1997/49442	4017

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EXAMINER

CHORBAJI, MONZER R

ART UNIT	PAPER NUMBER
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1744

DATE MAILED: 11/04/2002

12

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/744,297

Applicant(s)

GOELDNER, HELMUT

Examiner

MONZER R CHORBAJI

Art Unit

1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 July 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 23,24,26-33 and 35-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 23,24,26-33 and 35-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

This non-final office action is in response to the amendment received on 07/15/2002

Drawings

1. The corrected or substitute drawings were received on 07/15/2002. These drawings are objected to because the slide runners (24) in the proposed drawings support the tube-shaped treatment chamber (6) not the screw conveyor (9). The slide runners are supposed to support directly the screw conveyor.
2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "plurality of treating apparatuses being arranged in parallel so that they can be supplied simultaneously or sequentially by the shredder unit" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.
3. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 23-24, 26-28, 31-33, 35-36, 40-43, and 45-46 are rejected under 35 U.S.C. 102(b) as being anticipated by Goldner et al (U.S.P.N. 5,270,000).

With respect to claims 23, 33 and 36; Goldner et al teaches the following: a method and an apparatus for treating contaminated material (col.1, lines 5-6), an input unit (figure 1, 3), a conveyor system (figure 1, 24 and 16), a treatment chamber, which slants upward from a lower inlet (figure 1, 16), treatment chamber includes a first treatment zone (figure 1, 7 and 18) and a second treatment zone (figure 1, the unlabeled internal space of 16), an upper discharge end (figure 1, 27), contaminated material is moistened (figure 1, 19) in a liquid reservoir (since the treatment chamber 16 is slanted, it will inherently contains a reservoir in its lower end from the accumulating liquid) in first treatment zone (first heating zone) which is adjacent the lower end of the chamber by liquid present in the material (contaminated material inherently contains liquid) or water added (figure 1, 20) from the outside the treatment chamber (figure 1, 19), liquid in reservoir having a temperature below the boiling point of water by having heating means (col.10, lines 33-36. This would inherently increase the temperature of liquid sprayed by 19), and in the second treatment zone which extends from the first treatment zone to the upper end of the chamber, the material is heated to a temperature above the boiling point of water (col.1, lines 59-67) to create steam pressure (col.2, lines 46-51).

With respect to claim 24; Goldner et al teaches that the contaminated material is contaminated with infectious microorganisms (col.1, line 6).

With respect to claims 26-28, and 35; Goldner et al teaches the following: the steam pressure in the second zone is generated by evaporation of the inherent moisture (col.2, line 46) or by evaporation of liquid water added to the contaminated material from

outside the treatment chamber (col.2, line 46 and figure 1, 19 and 20), and the steam pressure in the second zone is generated (heating of the contaminated material by steam, col.10, line 13) by introducing steam into the chamber (col.10, lines 9-14).

With respect to claims 31-32, 43, and 46; Goldner et al teaches the following: contaminated material is introduced in portions (figure 1, 13) into the treatment chamber (figure 1, 3), portions introduced and discharged from the treatment chamber through locks (figure 1, 4 and figure 5, 64).

With respect to claims 40-42, and 45; Goldner et al teaches the following: heating means provided in an inner wall of chamber (figure 5, 65), heating means is provided in conveyor system (figure 1, 25), means for controlled introduction of microwave energy into treatment chamber (figure 6, 16 and 25), a shredder in input unit (figure 1, 6 and 15).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

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4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claim 47 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goldner et al (U.S.P.N. 5,270,000).

With respect to claim 47; Goldner et al teaches a plurality of treating apparatuses (figure 1, 18, 16, 17, 44, and 50) arranged parallel. However, having such a plurality of treating apparatuses is within the purview of a person skilled in the art so that the capacity of treating contaminated material can be increased.

9. Claim 44 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goldner et al (U.S.P.N. 5,270,000) in view of Goeldner (U.S.P.N. 6,368,555).

With regard to claim 44, Goldner discloses the use of an inclined screw conveyor (figure 1, 24 and col.5, line 27) such that the presence of a bearing on one end is intrinsic in order to maintain such a position. However, Goldner fails to disclose the use of slide runners. Goeldner's screw conveyors (6 and 28) rest on slide rails (i.e., slide runners). It would have been obvious to one having ordinary skill in the art to modify Goldner's screw conveyor to include slide runners since they produce an advantageous shearing and positive conveyance of the transported material (Goeldner, col.4, lines 15-17).

10. Claims 29-30 and 37-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goldner et al (U.S.P.N. 5,270,000) in view of Kline et al (U.S.P.N. 5,425,925).

The teachings of Goldner et al have previously been set forth with regard to claims 23-28, 31-36, and 40-47. With respect to claims 29-30 and 37-39, even though

Goldner et al does not disclose a mechanism to control the excess water build up which inherently results from having an inclined chamber, such a mechanism of controlling the level of water in the bottom of the chamber is an intrinsic property of the apparatus.

With respect to claims 29-30 and 37-39; Kline et al, which is in the art of treating contaminated material (col.1, lines 13-19) by having an inclined chamber (figure 2, 76) teaches the following: the first treatment zone includes a liquid reservoir (figure 1, 104), which is regulated by a weir or an overflow (figure 1, 108); liquid discharged from the weir or an overflow is recycled back to the liquid reservoir (figure 1, 54 and 46); a collection vessel (figure 1, 106, 54, 162, and 46), and where the weir or an overflow (figure 1, 108), the collection vessel (figure 1, 106), and the return line (figure 1, 54) are maintained at the same pressure as the treatment chamber (figure 1, 46). Since the chamber (figure 1, 46) is opened at its lower end (figure 1, 88 and 89) to the liquid reservoir, thus the above-mentioned structures are at the same pressure. Thus, it would have been obvious and one having ordinary skill in the art would have been motivated to utilize the teachings of Kline et al into Goldner et al in order to design a tank in the lower end of the chamber to enable the collection of fines for periodic removal (Kline et al, col.11, lines 21-23).

Response to Arguments

11. Applicant's arguments filed 07/15/2002 have been fully considered but they are not persuasive.

On page 3 of the response, applicant argues that Goldner does not disclose two distinct treatment zones and that since Goldner's apparatus is an open system therefore

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it is not capable of generating steam pressure. Goldner's apparatus has two distinct treatment zones as the applicant claims, a first treatment zone (figure 1, 7 and 18) and a second treatment zone (figure 1, the unlabeled internal space of 16). Goldner's apparatus is a closed system (figure 1, 4) and is capable of generating steam pressure (col.2, lines 49-51).

On page 3 of the response, applicant argues that Goldner's apparatus lacks a liquid reservoir to moisten the contaminated materials. However, since the treatment chamber 16 is slanted, it will inherently contain a reservoir in its lower end from the accumulating liquid. Also, Goldner teaches of spraying the material with a spraying head 19 from a water tank 20. See col.4, lines 46-53.

Goeldner reference is used to show that the screw conveyors (6 and 28) rest on slide rails (i.e., slide runners). In addition, a bearing must inherently support Goldner's chamber 16 at the top in order to maintain it in a slanted position.

On page 4 of the response, applicant argues that Goldner's system does not include a plurality of treatment apparatuses in parallel. However, Goldner's system does teach a plurality of treating apparatuses (figure 1, 18, 16, 17, 44, and 50) arranged in parallel such that the shredder unit (3 and 7) is connected to them.

On page 5 of the response, applicant argues that Kline fails to disclose two treatment zones or subjecting the material to pressure. Kline was used to show the concepts (claims 29-30 and 37-39) of a liquid reservoir regulated by an overflow such that liquid discharged from the overflow is recycled back to the reservoir. Furthermore,

Kline does teach a first treatment zone, which includes a liquid reservoir (104). See how claims 29-30 and 37-39 were addressed above.

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MONZER R CHORBAJI whose telephone number is (703) 305-3605. The examiner can normally be reached on M-F 8:30-5:00.

13. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ROBERT J WARDEN can be reached on (703) 308-2920. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3599 for regular communications and (703) 305-7719 for After Final communications.

14. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Monzer R. Chorbaji *MRC*
Patent Examiner
AU 1744
October 21, 2002

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